

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	1	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/779,248		02/08/2001	Ruchi D. Kapoor	M-11063 US	9962	
33031	7590	05/31/2006		EXAM	EXAMINER	
		HENSON ASCOL	MOORE	MOORE, IAN N		
4807 SPICE BLDG. 4, S		SPRINGS RD.		ART UNIT	PAPER NUMBER	
AUSTIN, T				2616		
				DATE MAILED: 05/31/200	6	

Please find below and/or attached an Office communication concerning this application or proceeding.

			>				
	Application No.	Applicant(s)					
	09/779,248	KAPOOR ET AL.					
Office Action Summary	Examiner	Art Unit					
	lan N. Moore	2616	<u>-</u>				
The MAILING DATE of this communication apperiod for Reply	opears on the cover sheet w	vith the correspondence address					
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statuent Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MO ate, cause the application to become A	ICATION. I reply be timely filed NTHS from the mailing date of this communication NBANDONED (35 U.S.C. § 133).					
Status			•				
1) Responsive to communication(s) filed on 27	February 2006.						
·—	·						
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.					
Disposition of Claims			•				
4) ⊠ Claim(s) <u>1,2,4-10,12-17 and 19-34</u> is/are per 4a) Of the above claim(s) is/are withdr 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1,2,4-10,12-17 and 19-34</u> is/are rejection claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and	awn from consideration.						
Application Papers							
9) The specification is objected to by the Examination 10) The drawing(s) filed on <u>09 May 2001</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the least of the least	a) accepted or b) obje te drawing(s) be held in abeya tection is required if the drawin	nnce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121	(d).				
Priority under 35 U.S.C. § 119			-				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	Paper No	Summary (PTO-413) o(s)/Mail Date Informal Patent Application (PTO-152)	·				

DETAILED ACTION

Drawings

- 1. The drawings are objected to because there is a lack of descriptive <u>text</u> legends for **FIG**.
- 1. It is suggested to describe labels 195, 191 and 192 as "Node 195", "Virtual Path 191, and "Physical Path 192", respectively. [37 CFR 1.83, CFR 1.84 [5(e)], MPEP § 608.02(e)]
- 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claim. Therefore, a memory (claim 16, line 6) and a plurality of processing engines (claim 34, line 3-4) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 2616

Claim Rejections - 35 USC § 102

Page 3

- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
 - (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1,2,5,9,10,16,17,23 and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Phaal (US006894972B1).

Regarding claims 1, 9 and 16, Phaal discloses a network node (see FIG. 1, 2, Router/Switching Devices/Agents 100, 230,240, or 250; see FIG. 5-8, Router/Switching Device 500 or 600) comprising:

a processing engine (see FIG. 5-8; microprocessor 540, 740, or 880) wherein the processing engine is configured to collect network traffic data (see col. 19, line 20-35; see col. 20, line 11-16, 25-30; see col. 4, line 15-25,59-65; perform sampling by copying/collection packets); and

a memory (see FIG. 5-8; memory 530, 660, 730, or 880) coupled to the processing engine and the memory is configured to store instructions configured to cause the processing engine (see col. 19, line 20-35; see col. 20, line 10-16, 25-30) to

receive a group of information (see FIG. 1, 5 and 6; Network Interface 110, 120, 510a-b, or 610 receive IP packet; see col. 19, lines 25-27, 55-60; see col. 8, line 5-35; see FIG. 12, step 320, see col. 12, line 20-21);

determine whether to process the group of information for network traffic data (see FIG. 3, step 330,360, determining whether to process IP packet for sample/traffic data, "yes" or "no"; see col. 12, line 20-30; see col. 4, line 20-26; also see col. 7, line 50 to col. 11, line 40 for sample/traffic data) according to a sample algorithm (see FIG. 9, flow sampling 900; see col. 4, line 59-60; see col. 11, line 55-64; statistical packet-based sampling or time-based sampling);

process the group of information for network traffic data collection if the determination is to process the group of information (see FIG. 3, step 3, step 370,380; sampling the IP packet for sample data by coping/collecting IP packet after determining in step 360; see col. 4, lines 16-21, 59-65; see col. 12, line 35-49); and

forward the group of information to the destination (see FIG. 3, step 390, send IP packet to destination; see col. 3, line 10-16, see col. 12, line 41-45).

Regarding claim 23, Phaal discloses an apparatus for collecting network traffic data see FIG. 2, Router/Switching Devices/Agents 230,240, or 250; see FIG. 5-8, Router/Switching Device 500 or 600) comprising:

one or more switch fabrics (see FIG. 1, switching/routing module 160; see FIG. 5,7, Bus 550 or 750; see FIG. 6, Switching ASIC 650; or see FIG. 8, Cross-bar switch 850; see col. 3, line 1-5; see col. 19, line 19-30; see col. 20, line 15-24);

one or more destination line cards (see FIG. 1,5, or 6; destination/output network interface 110,120, 510a-b,610,620,630, or 640) coupled to the one or more switch fabrics (see col. 3, line 1-5; see col. 19, line 25-30, 55-61);

a source line card (see FIG. 1,5, or 6; source/input network interface 110, 120, 510a-b, 610,620,630, or 640) coupled to the one of the one or more switch fabrics (see col. 3, line 1-5; see col. 19, line 25-30, 55-61) wherein

the source line card receives a data packet (see col. 19, lines 25-27, 55-60; see col. 8, line 5-35; see FIG. 12, step 320, see col. 12, line 20-21; input/source Network Interface 110, 120, 510a-b, or 610 receive IP packet);

a router processor (see FIG. 5-8; microprocessor 540, 740, or 880), couple to switch fabric (see col. 19, line 20-35; see col. 20, line 11-16, 25-30; see col. 4, line 15-25,59-65), and configured to

determine whether to process the data packet for network traffic data collection (see FIG. 3, step 330,360, determining whether to process IP packet for sample/traffic data copying/collecting, "yes" or "no"; see col. 12, line 20-30; see col. 4, line 20-26; also see col. 7, line 50 to col. 11, line 40 for sample/traffic data) according to an sample algorithm (see FIG. 9, flow sampling 900; see col. 4, line 59-60; see col. 11, line 55-64; statistical packet-based sampling or time-based sampling);

process the data packet for network traffic data collection if the determination is to process the data packet (see FIG. 3, step 3, step 370,380; sampling the IP packet for sample data by coping/collecting IP packet after determining in step 360; see col. 4, lines 16-21, 59-65; see col. 12, line 35-49); and

forward the data packet to one of the one or more destination line cards (see FIG. 3, step 390, send IP packet to destination network interface; see col. 3, line 10-16, see col. 12, line 41-45).

Regarding claims 2, 10, 17 and 24, Phaal discloses wherein the group of information or packet is an IP packet (see col. 19, lines 25-27, 55-60; see col. 8, line 5-35; see FIG. 12, step 320, see col. 12, line 20-21; Internet packet, or IP packet).

Regarding claim 5, Phaal discloses wherein forwarding the group of information to the destination (see FIG. 3, Step 390; send packet to destination) is performed after processing the group of information (see FIG. 3, step 370 and 380; after processing the IP packet for sampling; see col. 4, lines 16-21, 59-65; see col. 12, line 35-49).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 4, 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal in view of Flammer (US005488608A).

Regarding claims 4, 12, and 19, Phaal discloses means for identifying (see FIG. 5-8; microprocessor 540, 740, or 880) the destination using a forwarding table (see FIG. 5-8; memory 530, 660, 730, or 880; see col. 19, line 20-35; see col. 20, line 10-16, 25-30; see FIG. 3, step 34; see col. 12, line 25-28);

means for automatically forwarding (see FIG. 5-8; microprocessor 540, 740, or 880) the group of information to the destination if the destination is in the forwarding table (see FIG. 3,

Art Unit: 2616

after assigning according to the memory/table in step 360, send packet to the destination at step 390; see col. 12, line 30-45); and

means for sending the group of information (see FIG. 1,5, or 6; source/input network interface 110,120, 510a-b, 610,620,630, or 640 sends packets; see col. 3, line 1-5; see col. 19, line 25-30, 55-61) to one or more processing engines (see FIG. 5-8; microprocessor 540, 740, or 880; see col. 19, line 20-35; see col. 20, line 11-16, 25-30; see col. 4, line 15-25,59-65).

Phaal does not explicitly disclose determining routing to the destination and forwarding the group of information according to the determined routing otherwise. However, Flammer teaches means for identifying (see FIG. 1, Relay Node P or Y) the destination using a forwarding table (see FIG. 2, S9 and S13, destination in routing table? see col. 3, line 41-45; see col. 5, line 1-5);

means for automatically forwarding (see FIG. 1, Relay Node P or Y) the group of information to the destination if the destination is in the forwarding table (see FIG. 2, S13, S8, send packet to the destination by using routing table when S9 is Yes; see col. 5, line 1-15); and

means for sending (see FIG. 1, Relay Node P or Y) the group of information to one or more processing engines (see FIG. 1, processing means in the Relay Node P or Y) to determine routing to the destination (see FIG. 2, S10-S12, processing the routing table for a room for a new entry and creating entry for destination) and forwarding the group of information according to the determined routing otherwise (see FIG. 2, S13, S8, send packet to the destination by using routing table when S9 is No; see col. 5, line 1-15. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide determining routing when the destination is not in the routing table, as taught by Flammer in the system of Phaal, so

that it would enhances the speed and efficiency of the network; see Flammer col. 3, line 20-25; see col. 2, line 34-50.

7. Claim 6-7, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal in view of Kametani (US 20030037042A1) and further in view of Dietz (US006651099B1).

Regarding claims 6, 13 and 20, Phaal discloses means for determining (see FIG. 5-8; microprocessor 540, 740, or 880) if the group of information is part of one or more recorded traffic flows (see col. 2, line 2-4; see col. 4, line 6-12; FIG. 5-8; traffic flows in the memory/table 530, 660, 730, or 880; see col. 19, line 20-35; see col. 20, line 10-16, 25-30; see FIG. 3, step 34; see col. 12, line 25-28);

means for incrementing (see FIG. 5-8; microprocessor 540, 740, or 880) a field in an existing entry in the table ((see col. 2, line 2-4; see col. 4, line 6-12; FIG. 5-8; a field/counter in the traffic flows memory/table 530, 660, 730, or 880) if the group of information is part of the one or more recorded traffic flow (see FIG. 3, step 350, after IP packet is assigned/identified, increments total packets; see col. 12, line 30-35).

Phaal does not explicitly disclose means for creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows. However, Kametani teaches means for determining (see FIG. 1, microprocessor 11, packet processor 14, and packet searcher 16) if the group of information is part of one or more recorded traffic flows (see FIG. 1, search IP header in the IP flow table 17a in memory 17; see page 3, paragraph 40-46; see FIG. 4, step S 101-S102; see page 4, paragraph 59-60);

Art Unit: 2616

means for creating a new entry in a table (see FIG. 2, IP flow table) if the group of information is not part of the one or more recorded traffic flows (see FIG. 4, S102 Found IP header? with "No", and see FIG. 5, S112, adding the address on IP flow table);

forwarding if the group of information is part of the one or more recorded traffic flows (see FIG. 4, S104,105; see page 4, paragraph 60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a new entry in table is the packet is not part of the flow table, as taught by Kametani in the system of Phaal, so that it would provide high-speed data searching, updating and routing; see Kametani page 1, paragraph 13-17.

Neither Phaal nor Kametani explicitly disclose time stamping the group of information. However, Dietz teaches incrementing a field (see col. 24, lines 55-56, see col. 14, lines 54-56; a packet count in the counters, and note that when counting, the data must be incremented) in an existing entry in the table (see FIG. 3, Flow entry database) if the group of information is part of the one or more recorded traffic flows (see FIG. 3, steps 316 and 322; see col. 14, lines 3-35, 48-57; see col. 24, lines 50-59; note that when the packet is found to have a match flow-entry in the database 324, the calculator enters the measured statistical data in the flow-entry); and time stamping the group of information (see col. 20, line 40-65; note that the time stamps are generated, collected, and analyzed for each packet of the flow).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to time stamp packet, as taught by Dietz, in the combined system of Phaal and Kametani, so that it would provide recognize and classify all flows that pass either

direction of the network and tune the performance of the network; see Dietz col. 4, lines 40 to col. 5, lines 10.

Regarding claims 7, 14 and 21, Phaal discloses creating a traffic information packet (see FIG. 2, Router/Switching Device/Agent 230,240,250; see col. 4, line 30-40; see col. 7, line 44 to col. 11, line 51; forming/creating reporting packet by the Router/Switching Device/Agent) and transmitting the traffic information packet to a network traffic data collection application (see FIG. 2, reporting packets are sent to a Server 210; see col. 4, line 30-40).

Regarding claims 8, 15 and 22, Phaal discloses wherein the traffic information packet comprises a header (see col. 4, line 30-40; see col. 7, line 55 to col. 8, line 30; reporting packet contains a HEADER) and one or more flow records (see col. 4, line 30-40; see col. 7, line 55 to col. 8, line 30; reporting packet contains information about flows inside each of the switching devices).

8. Claims 25,31,32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal as described above in claim 1,9,16,23 and further in view of Blandy (US005884080A).

Regarding Claim 25,31,32 and 33, Phaal discloses wherein the router processor is further configured to select and perform the sample algorithm as stated above in claims 1, 9, 16 and 23. Phaal further discloses selecting the data packet based on an examination of traffic attribute data in the data packet (see FIG. 3, step 370,380; selecting the sample packet according to analyzing/examining of sample/traffic data (i.e. header or features from the packet; see col. 12, line 35-16; or other sample/traffic data disclose in col. 7, line 50 to col. 11, line 40); see col. 9, lines 44-55; see col. 10, lines 35-42).

Phaal does not explicitly disclose selection from <u>one</u> of liner sampling, exponential sampling, natural logs sampling, and burst sampling. However, Blandy teaches determining is performed according to a sampling algorithm (see FIG. 2 and 3, sampling method) that is selected from <u>one</u> of a burst sampling algorithm (see col. 2, lines 64-66; see col. 3, lines 12-19; col. 4, lines 26-50; sampling burst method); and

Page 11

selecting the data packet based on an examination of traffic attribute data in the data packet (see FIG. 2, 33-39; see FIG. 3, 41-58; see col. 4, lines 30 to col. 6, lines 26; setting/allocating data according to time/count of traffic data). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a burst sampling algorithm, as taught by Blandy in the system of Phaal, so that it would provide a performance system monitor system performance with minimal changes to the operating system and no changes to application code; also it would provides mechanism for monitoring system performance by sampling in a burst mode, rather than once per interrupt; see Blandy col. 2, line 55 to col. 3, lines 10.

9. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal in view of Flammer as described above in claim 23, and further in view of Hebb (U.S. 6,463,067).

Regarding Claim 26, the combined system of Phaal and Flammer discloses all aspect of the claim including forwarding the data packet to one of the one or more destination line cards as described above in claim 4, 12, 19, and 23.

Neither Phaal nor Flammer explicitly discloses the source line card is performing processing of packet data. However, Hebb discloses performing processing of packet data (see

FIG. 2, Forwarding Engine 22) is located on the source line card (see FIG. 2, a line interface unit PHY 1/O and Framing 20 unit; note that Forwarding Engine 22 within interface card 20; see col. 3, lines 55-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide source/input card performing packet processing, as taught by Hebb in the combined system of Phaal and Flammer, so that it would enhance the efficiency and speed of the communication between the packet process and the forwarding engine, and allowing for high-speed packet forwarding and classification; see Hebb col. 2, lines 25-54.

Regarding claim 27, Hebb discloses wherein the one or more processing engines (see FIG. 2, Forwarding Engine 22) is located on the source line card (see FIG. 2, a line interface unit PHY 1/O and Framing 20 unit; note that Forwarding Engine 22 within interface card 20; col. 3, lines 55-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide source/input card performing packet processing, as taught by Hebb in the combined system of Phaal and Flammer, for the same motivation as set forth above in claim 26.

10. Claim 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal in view of Hebb, Kametani (US 20030037042A1), and further in view of Dietz (US006651099B1).

Regarding claim 28, Phaal discloses the router to processor the data packet for network traffic data collection as set forth above. Phaal further discloses determining (see FIG. 5-8; microprocessor 540, 740, or 880) if the group of information is part of one or more recorded

Art Unit: 2616

traffic flows (see col. 2, line 2-4; see col. 4, line 6-12; FIG. 5-8; traffic flows in the memory/table 530, 660, 730, or 880; see col. 19, line 20-35; see col. 20, line 10-16, 25-30; see FIG. 3, step 34; see col. 12, line 25-28);

increments (see FIG. 5-8; microprocessor 540, 740, or 880) a field in an existing entry in the table ((see col. 2, line 2-4; see col. 4, line 6-12; FIG. 5-8; a field/counter in the traffic flows memory/table 530, 660, 730, or 880) if the group of information is part of the one or more recorded traffic flow (see FIG. 3, step 350, after IP packet is assigned/identified, increments total packets; see col. 12, line 30-35).

Phaal does not explicitly disclose performing processing of packet data located on the source line card. However, Hebb discloses performing processing of packet data (see FIG. 2, Forwarding Engine 22) is located on the source line card (see FIG. 2, a line interface unit PHY 1/O and Framing 20 unit; note that Forwarding Engine 22 within interface card 20; see col. 3, lines 55-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide source/input card performing packet processing, as taught by Hebb in the system of Phaal, so that it would enhance the efficiency and speed of the communication between the packet process and the forwarding engine, and allowing for high-speed packet forwarding and classification; see Hebb col. 2, lines 25-54.

Neither Phaal nor Hebb explicitly discloses creating a new entry in a table if the group of information is not part of the one or more recorded traffic flows. However, Kametani teaches means for determining (see FIG. 1, microprocessor 11, packet processor 14, and packet searcher 16) if the group of information is part of one or more recorded traffic flows (see FIG. 1, search

IP header in the IP flow table 17a in memory 17; see page 3, paragraph 40-46; see FIG. 4, step S 101-S102; see page 4, paragraph 59-60);

creating a new entry in a table (see FIG. 2, IP flow table) if the group of information is not part of the one or more recorded traffic flows (see FIG. 4, S102 Found IP header? with "No", and see FIG. 5, S112, adding the address on IP flow table);

forwarding if the group of information is part of the one or more recorded traffic flows (see FIG. 4, S104, 105; see page 4, paragraph 60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to create a new entry in table is the packet is not part of the flow table, as taught by Kametani in the combined system of Phaal and Hebb, so that it would provide high-speed data searching, updating and routing; see Kametani page 1, paragraph 13-17.

Neither Phaal, Hebb, nor Kametani explicitly discloses time stamping the group of information. However, Dietz teaches incrementing a field (see col. 24, lines 55-56, see col. 14, lines 54-56; a packet count in the counters, and note that when counting, the data must be incremented) in an existing entry in the table (see FIG. 3, Flow entry database) if the group of information is part of the one or more recorded traffic flows (see FIG. 3, steps 316 and 322; see col. 14, lines 3-35, 48-57; see col. 24, lines 50-59; note that when the packet is found to have a match flow-entry in the database 324, the calculator enters the measured statistical data in the flow-entry); and time stamping the group of information (see col. 20, line 40-65; note that the time stamps are generated, collected, and analyzed for each packet of the flow).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to time stamp packet, as taught by Dietz, in the combined system of

Art Unit: 2616

Phaal, Hebb and Kametani, so that it would provide recognize and classify all flows that pass either direction of the network and tune the performance of the network; see Dietz col. 4, lines 40 to col. 5, lines 10.

Regarding claim 29, Phaal discloses creating a traffic information packet (see FIG. 2, Router/Switching Device/Agent 230,240,250; see col. 4, line 30-40; see col. 7, line 44 to col. 11, line 51; forming/creating reporting packet by the Router/Switching Device/Agent) and transmitting the traffic information packet to a network traffic data collection application (see FIG. 2, reporting packets are sent to a Server 210; see col. 4, line 30-40).

Regarding claim 30, Phaal discloses wherein the traffic information packet comprises a header (see col. 4, line 30-40; see col. 7, line 55 to col. 8, line 30; reporting packet contains a HEADER) and one or more flow records (see col. 4, line 30-40; see col. 7, line 55 to col. 8, line 30; reporting packet contains information about flows inside each of the switching devices).

11. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal in view of Gollamudi (US006990103B1).

Regarding Claim 34, Phaal discloses a processing engine as set forth above in claim 16.

Phaal does not explicitly disclose a plurality of processing engines. However, Gollamudi teaches a network node (see FIG. 1, Router 22) comprises: a plurality of processing engines (see FIG. 1, Processing Module 50 and 54), wherein the plurality of processing engines comprise the processing engine (FIG. 1, Processing Module 50 or 54); see col. 3, line 24-66. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plurality of processing engines, as taught by Gollamudi in the system of Phaal,

so that it would reduce overhead traffic in providing routing information; see Gollamudi col. 2, line 1-4,30-62.

Response to Arguments

12. Applicant's arguments with respect to claims 1,24-10,12-17,19-34 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on 9:00 AM- 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 571-272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM 5-18-06

PATENT EXAMINER, DIVISION 2616